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ABSTRACT

The report summarizes the nature, scope, and procedures used in the development of a student-oriented instructional program for training police officers in the enforcement of driving-while-intoxicated laws. Instructional materials were prepared and tested in four field trials, revised where necessary, and prepared for mass distribution and program implementation. The course is designed to last 40 hours and covers 16 subjects: orientation, alcohol and highway safety, preparing for alcohol enforcement task, detection of drinking driver (pre-apprehension), detection of drinking driver (apprehension), pre-arrest investigation (field contact), pre-arrest investigation (accidents), handling of the drinking driver suspect, psychophysical testing (classroom), psychophysical testing (laboratory), chemical testing, experience in degenerative effects of alcohol, legal authority in alcohol enforcement, case presentation (testimony), course review, and student and course evaluation. The report includes an outline of the course, and a list of teaching strategies keyed to the outline. An 80-item bibliography and lists of course-related instructional media, transparencies, and evaluation aids conclude the document. (Author/PR)

ED110725

DEVELOPMENT OF COURSE AND MATERIALS FOR TRAINING IN DWI LAW ENFORCEMENT: DETECTION, APPREHENSION AND TESTIMONY

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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James E. Carnahan, Ph.D.

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16. Abstract

This report summarizes the nature, scope and procedures utilized in the development of a student oriented instructional program for training police officers in DWI enforcement. Instructional materials were prepared and tested in four field trials, revised where necessary, and prepared for mass distribution and program implementation.

The entire training package consists of an Instructor's Manual, Student Manual, Course Guide, Instructional Aids Packet (audio-visual materials), and an Evaluation Aids Packet. Fifty-four problem solving situations are depicted on 16 mm film; four mock trial segments are on VTR; numerous other visuals and student and course evaluation forms were prepared. The complete instructional package is necessary to conduct a training course.

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PREFACE

For many years there has been a growing concern about the level of alcohol enforcement activities and recognition of the need for DWI Law Enforcement Training. Although some training units primarily in chemical testing and arrest procedure have been incorporated in a few police academies, little has been done to develop comprehensive courses of instruction for law enforcement officers in dealing with alcohol related offenses per se.

In order to provide this needed curriculum, the Michigan Office of Highway Safety Planning awarded a contract to the Highway Traffic Safety Center in 1972 to develop and test an alcohol enforcement training program for law enforcement officers. The Highway Traffic Safety Center was then awarded a contract by the National Highway Traffic Safety Administration in July, 1973, to convert the Michigan Police Alcohol Training Course materials into an instructional package that could be used in states other than Michigan. Three field trials were conducted to test the revised training package. One additional field trial was conducted to assess potential problems in use of the package by personnel from other agencies.

The DWI Law Enforcement Training program consists of the following basic materials: (1) an Instructor's Manual, which contains lesson plans, learning activities, course content and teaching strategies; (2) a Student Manual, which is intended to serve as a workbook to assist the trainee in successfully completing the course; (3) a Course Guide, which gives an overview of the instructional program; (4) a Packet of Instructional Aids, which contains films, video tapes and transparencies; (5) a Packet of Evaluation Instruments, which contains forms used in student and course evaluation; and (6) a Final Report, which describes the project.

The DWI Law Enforcement Training program, when implemented nationally, should improve the efficiency of law enforcement officers alcohol enforcement activities.

ACKNOWLEDGMENTS

The documents and packets for the DWI Law Enforcement Training Course were prepared by the staff of the Highway Traffic Safety Center at Michigan State University for the National Highway Traffic Safety Administration.

Fourteen months (July 1973 - August 1974) were allotted to complete the project which required a tremendous level of effort involving several members of the HTSC staff and other resource personnel. Each of the individuals listed in the following project participant roster made a contribution to some phase of the project.

Preparation of course materials involved the services of many agencies. Filming the many detection clues was materially assisted by personnel of the East Lansing Police Department; Ingham County Sheriff's Department; Michigan Department of State Police; and the Michigan State University Department of Public Safety.

Preparation of additional instructional aids (video tapes) concerning the case presentation portion of the curriculum involved the personnel and facilities of the Michigan Attorney General's Office; Lansing Police Department; and the Lansing District Court.

Assistance was rendered by the Department of Psychiatry, College of Human Medicine, Michigan State University, concerning medical problems likely to be encountered while performing alcohol enforcement duties. The Marathon County (Wisconsin) Sheriff's Department furnished assistance on this topic as well as did the Marathon-Cheboygan Counties Alcohol Safety Action Project.

The Governor's Representatives for Highway Traffic Safety and their staffs in Texas, Washington and Alaska provided funds to cover travel and subsistence costs for conducting field trials of the training course. The Commissions for Law Enforcement Education and Training in Texas and Washington, the Central Texas ASAP and the Alaska State Troops served as hosts for the field trials.

The project staff is indebted to the above agencies for the assistance provided in the development and testing of this curriculum. Agency personnel are to be commended as well for the interest demonstrated in bringing this research effort to a successful conclusion.

The Instructor's Manual and the Student Manual for the course were prepared by Carnahan, Holmes, Keyes, Stemler and Dreveskracht with the assistance of other project staff members. The Course Guide and the Final Report were written by the Principal Investigator, Carnahan.

The Instructional Aids Packet for the course was prepared by Apps, Shinn and Nelson of the HTSC staff with the assistance of several staff members. In addition to the development of instructional materials, Shinn and Apps edited and produced the several documents and packets of the project.

The Evaluation Aids Packet for the course was prepared by Carnahan, Price and Dreveskracht with the assistance of other project staff members.

DWI LAW ENFORCEMENT TRAINING

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Development of Course and Materials for Training in DWI Law Enforcement: Detection, Apprehension and Testimony

INTRODUCTION

The Problem

Driving under the influence of liquor is a major contributor to the fatal accident toll in the United States. Numerous studies have documented the fact that, in 50% or more of fatal accidents, alcohol is a contributing factor. In some of the studies, a high proportion of the fatal accidents involved either a driver or pedestrian with a sufficiently high BAC to be definitely under the influence.

While increased enforcement activity is resulting in an even greater number of drivers being apprehended when driving while intoxicated (DWI), few are being apprehended whose blood alcohol content is under .15%. This is cause for real concern when the number of DWI drivers under .15% BAC far exceed the number above that level. In the Grand Rapids study by Borkenstein et. al., it was found that in the study group of drivers stopped there were more than three times as many drivers whose BAC was between .10% and .15% than over .15%.

Many states have lowered the statutory presumptive blood alcohol level for the DWI offense to .10% BAC. This makes it a law enforcement responsibility to arrest for DWI those drivers in the range from .10% to .15% BAC as well as those over .15%

BAC. These arrests will occur if the police are competent to detect and apprehend DWI drivers in the .10% to .15% BAC range.

The detection task in alcohol enforcement is fundamental to all other alcohol enforcement tasks. It is necessary to locate the drinking driver: (1) to institute enforcement action; (2) to establish the framework for investigative activities; (3) to lay the foundation for accumulating evidence; and (4) to build a case for subsequent trial and conviction.

The entire alcohol countermeasures program depends on the detection and apprehension of the drinking driver. Experience shows that few problem drinking drivers are identified by other agencies; the police are the primary source for the identification of problem drivers.

Background

Michigan's Response to Problem. Realizing that more enforcement effort needed to be directed at DWI offenders, especially those having BAC levels below .15%, Michigan initiated a course development project and training program in 1972 for law enforcement officers. The objective was to help law enforcement officers become more competent in detecting and apprehending DWI drivers and in preparing cases so convictions could be expected.

It was recognized that the training would have to be unusually good to convince the officers attending the course that there was more to the enforcement task than they presently knew (or at least were practicing). In addition, the training would

have to interest the officers in doing more DWI enforcement if greater benefits in terms of reducing alcohol related accidents were to be obtained. Obviously the training would need to be quite specialized and specific if it were to be effective in developing the officers' ability to identify subtle clues which would enable detection of drinking drivers with BACs as low as .10%. The instruction would also have to be relevant to the officers' tasks in the real world patrol environment.

To accomplish this, the Michigan Office of Highway Safety Planning awarded a contract to Michigan State University's Highway Traffic Safety Center to develop and test a 40-hour Police Alcohol Training (PAT) course designed to improve officers' ability to detect drinking drivers in the .10% to .15% BAC range and to prepare their cases effectively. The course was also to motivate officers to increase their DWI enforcement activities especially directed at drivers who have a BAC in the .10% to .15% range.

Nature of Curriculum Development Activities. The Highway Traffic Safety Center (HTSC) performed numerous tasks and subtasks in the development and testing of the initial Police Alcohol Training (PAT) program. These were reported in detail in a final technical report submitted to the Michigan Office of Highway Safety Planning (MOHSP) in November of 1972.[1] A brief

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[1] James E. Carnahan, Police Alcohol Training Project, Technical Report, prepared for Michigan Office of Highway Safety Planning, November, 1972.

summary of these activities is set forth below to assist the reader in understanding the background of the DWI enforcement training project.

A review of the literature on police alcohol enforcement training revealed that material was quite limited. HTSC had to identify and develop new material.

Visitations were made to several select sites to conduct a task analysis of the alcohol enforcement function. Project team members rode for many man-hours with numerous officers from various law enforcement agencies to analyze their tasks, activities, competencies and training needs. Data was collected on types of tasks and activities, time spent on each activity, skills demonstrated, knowledge needed, decision making process and experience requirements which designate entry level criteria. The complete task analysis appears in Appendix B of the PAT Technical Report.[2] The analysis identified 9 functional areas, 39 major tasks, 157 primary tasks, 268 competencies and 921 different topic areas for training.

In addition to collecting data for the job analysis while in the field, the project team identified and classified numerous drinking-driver detection clues that patrol officers should be able to look for and recognize in order to effectively perform the alcohol enforcement task. Table 1 is a summary of the numbers and types of detection clues utilized in the training

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[2] Ibid.

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Table 1
NUMBER AND TYPES OF CLUES BY DETECTION PHASE

	Veh. Man.	Human Ind.	Other Evid.	Total	Veh. Man.	Human Ind.	Other Evid.	Total	Veh. Man.	Human Ind.	Other Evid.	Total
Identification	30	15	-	45	76	37	-	113	148	87	-	235
Reinforcement	12	7	-	19	30	18	-	48	38	18	-	56
Investigation Field Contact	-	50	4	54	-	84	4	88	-	105	18	123
Investigation Accident	-	2	8	10	-	3	18	21	-	6	25	31
TOTAL	42	74	12	128	106	142	22	270	186	216	43	445

materials.[3]

Upon completion of the job analysis, a curriculum was prepared based entirely on the actual tasks performed by patrol officers in their alcohol enforcement activities. These data were organized into a seven-week (215 hours) course. The course outline for this seven-week course appears in Appendix C of the PAT Technical Report.[4]

Two sets of criteria were used (content criteria and entry level criteria) to reduce the 921 topics of the seven-week course to a one-week (40 hours) course containing the most pertinent material.

PROJECT DESCRIPTION

Purpose

The purpose of this project to develop a course and materials for training in DWI law enforcement was to improve the usefulness, efficiency and administration of the Michigan Police Alcohol Training (PAT) course by converting the Michigan PAT course materials into an instructional package that could be used in states other than Michigan. Essential instructional media, including printed material, was further developed and refined for the purpose of large scale production and nationwide

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[3]An itemized listing of all detection clues is appended to the appropriate subject in the DWI Enforcement Training Student and Instructor's Manual. Select examples of each type of clue have been placed on 54 16mm filmed situations.

[4]Carnahan, PAT Technical Report.

distribution by NHTSA. This included revision of the program and materials as well as making changes in the instructional media.

The DWI law enforcement training project was to prepare a refined one-week course to improve national alcohol enforcement activities. More effective DWI law enforcement activities could ultimately contribute to a measurable reduction of alcohol-related traffic incidents throughout the various states.

The police alcohol enforcement function is the key to all of the efforts by the agencies and jurisdictions which depend on the police for the detection and apprehension of the drinking driver. It, therefore, follows that any appreciable improvement in control of the drinking driver must be dependent upon increasing the alcohol enforcement effectiveness of the police officer who makes the initial contact.

A basic problem in assuring that sufficient alcohol enforcement efforts are made by the general patrol officer is one of interest and motivation. This is due to various reasons but the principle cause is the many other policing responsibilities bidding for the officer's time, energy and interest. This problem could be overcome through an effective, quality training program designed to: (1) increase the officer's understanding of the dimensions and ramifications of the alcohol-driving problem; (2) instill insights into alcohol-related behavior; and (3) enhance his performance in the alcohol enforcement process.

Nature of Project (Developmental Concept)

Both those initial developmental activities conducted during the Michigan PAT project and those activities performed in this project utilized a technique that differs from the traditional curriculum development method. The conept utilized was that of curriculum construction based on task performance requirements to properly execute the enforcement duties and responsibilities of a particular statute. Instead of building curriculum from the general to the particular, the DWI enforcement training project methodology focused entirely on specific statutes. The course was designed around the task requirements and decision making processes that constitute the specific enforcement responsibilities.

This curriculum development concept is sometimes referred to as IMPACT training and assures more appropriate use of training time and results in more efficient and economical use of manpower. The DWI training course is therefore actually skill training in the enforcement of particular statutes (STEPS).

The DWI enforcement course was designed to develop a course of instruction which would provide a large number of general patrol officers with an effective alcohol enforcement program. This program offers the student-officer both a challenge and pertinent useful information which will enhance his self-confidence and assist him in his daily alcohol-related contact situations. This course of instruction relates directly to the officer's alcohol enforcement tasks and utilizes extensive

instructional aids and materials.

The completed DWI enforcement instructional program was developed and tested in four field trials, revised in accordance with test results and is now ready for implementation.

Project Significance

The DWI Law Enforcement Training Project has resulted in the following:

1. More efficient instruction of the course.
2. More efficient administration of the course.
3. A more uniform course, insuring that the learning objectives are met regardless of where the course is conducted.
4. Enabling the course to be taught by different instructors without depreciating the intended objectives.
5. A more stimulating course for the students.
6. Less preparation by those doing the instruction.
7. More real world situations for instructional use.
8. Specialized instruction to be offered even when the instructors cannot be there in person; e.g., the demonstration of psychophysical manifestations of alcohol influence.

General Objectives

When implemented throughout the nation, the DWI Law Enforcement Training Program will enhance the achievement of the

following alcohol enforcement countermeasure goals:

1. Improve the capabilities of police officers for detecting and apprehending drivers who are operating a vehicle while impaired or under the influence.

2. Increase the capability of police officers involved in DWI court cases through:

   a. Improvement of case preparation by the arresting officer.

   b. Improvement of court testimony by the arresting officer.

3. Develop an understanding and appreciation by police officers of the complex involvement of alcohol in everyday life and in problems confronting police.

4. Improve understanding by police officers of the psychological and sociological aspects of alcohol use and abuse.

Specific Project Tasks

The following tasks were completed in the performance of the project:

1. Developed a project plan which included products, schedules, personnel effort and costs.

2. Submitted to NHTSA the alcohol enforcement officer's job analysis; subjects, lessons and topics for the course; criteria and methodology used to select subject matter content; methods employed in conducting experimental courses to test the instructional package.

3. Analyzed the contents of the Michigan PAT course including text materials, teaching strategies and instructional media aids for each instructional unit to determine needed revisions and conversions.

4. Planned, designed and produced new and revised instructional media aids (motion picture films, videotapes, and overhead projectuals) determined to be necessary in Task 3.

5. Revised content and teaching strategies of the Michigan Police Alcohol Training Course in accordance with the changes resulting from Tasks 3 and 4.

6. Organized and conducted field trials of the training course to test the revised instructional package.

7. Revised the instructional package materials as required by field trials.

8. Prepared final report and produced revised final products of the instructional package.

PROCEDURE

Prepared Instructional Package

Developed Course Structure

The content of the one-week course is organized into sixteen subjects. The flow diagram in Chart 1 sets forth the structure of the course and the scope of the material covered. Each of the sixteen subjects covered in the course is identified in a cell at the top of the chart. These cells do not represent equal amounts of training emphasis or subject matter importance, but serve to provide a method of classifying the content of the course and to indicate methods of sequencing for the purpose of program presentation.

The units and unit members appear in cells on Chart 1, below the subjects to which they pertain. The 36 units contain 164 topics, 64 of which are content topics and 100 are review, overview and summary topics. Lesson plans were developed for each unit. Therefore, for the purpose of the DWI Law Enforcement

Chart 1

Program Subject Categories and Their Corresponding Lessons

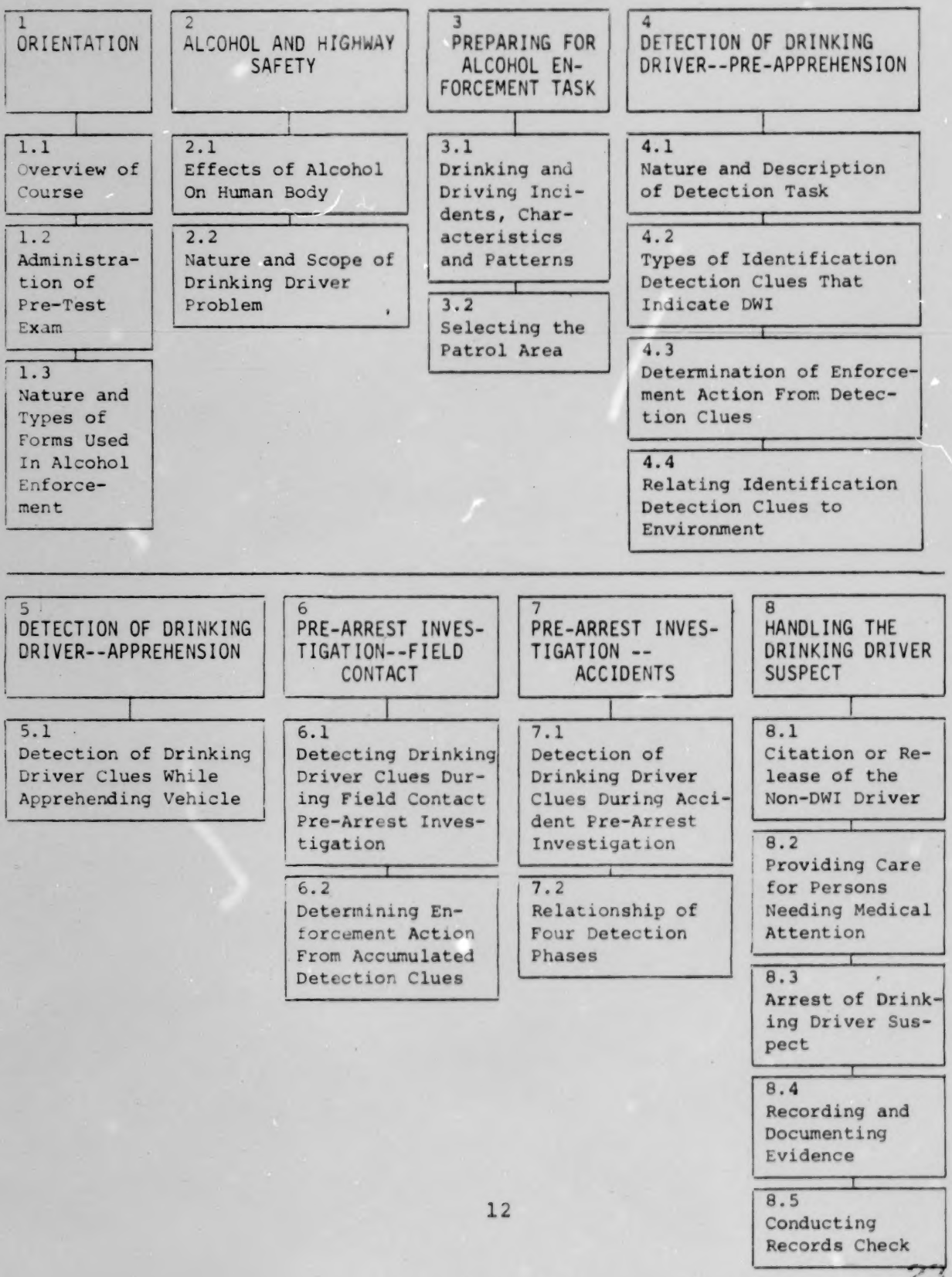
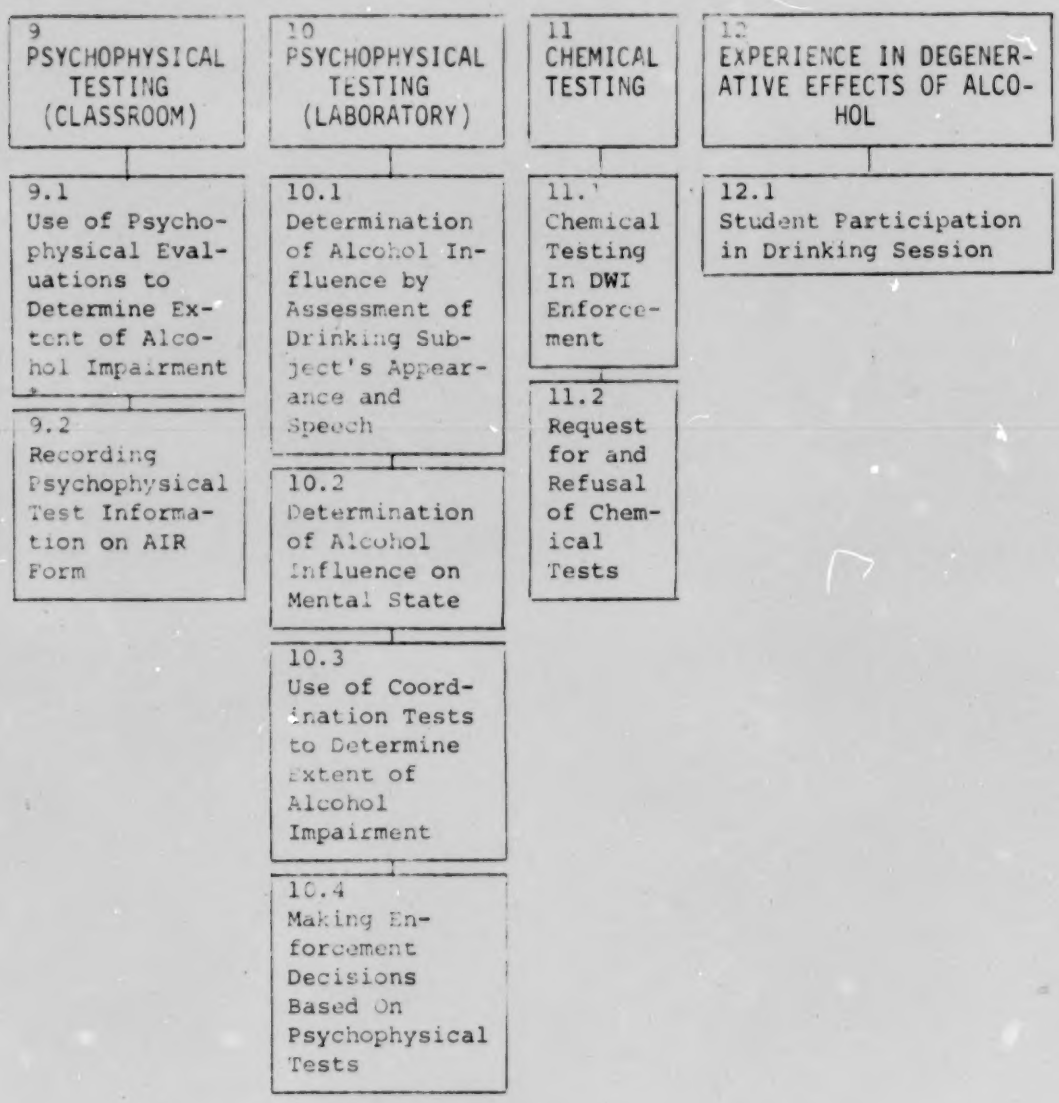


Chart 1 (cont.)

Program Subject Categories and Their Corresponding Lessons



Course, a unit and a lesson are synonymous.

There are five levels of objectives in the course structure; course objectives, a subject objective for each subject, a unit objective for each unit or lesson, terminal behavioral objectives for each of the 64 content topics and learning objectives for each of the 64 content topics.

Developed Course Outline

The specific content areas covered in the DWI Law Enforcement Course are outlined below. The subjects/units/topics that make up the course are as follows:

1. ORIENTATION

1.1 Overview of Course . . . . . .

- 1.1.1 Course objectives.
- 1.1.2 Plans and procedures for conducting course.
- 1.1.3 Evaluation methods for course.

1.2 Administration of Pre-Test Examination . . . . . .

- 1.2.1 Administration of pre-test examination.

1.3 Nature and Types of Forms Used in Alcohol Enforcement

- 1.3.1 Nature and number of report forms used in alcohol enforcement
- 1.3.2 Design and style of required reports.

2. ALCOHOL AND HIGHWAY SAFETY

2.1 Effects of Alcohol on the Human Body . . . . . .

- 2.1.1 Overview of unit.
- 2.1.2 Physiological processes of alcohol absorption, metabolism and elimination.
- 2.1.3 Individual tolerance in use of alcohol.
- 2.1.4 Effects of alcohol on brain and body functions.
- 2.1.5 Summary of unit.

2.2 Nature and Scope of Drinking Driver Problem . . . . .

2.2.1 Overview of unit.
2.2.2 Classification of drinking drivers.
2.2.3 Accidents related to drinking and driving.
2.2.4 Summary of unit.

3. PREPARING FOR ALCOHOL ENFORCEMENT TASK

3.1 Drinking and Driving Incidents, Characteristics and Patterns . . . . . .

3.1.1 Review of previous lesson.
3.1.2 Overview of unit.
3.1.3 Nature of drinking and driving incidents (offenses) in total driving population.
3.1.4 Characteristics of driving patterns of impaired drivers.
3.1.5 Probabilities of drivers on road who have been drinking.
3.1.6 Use of alcohol enforcement as a deterrence (prevention).
3.1.7 Summary of unit.

3.2 Selecting the Patrol Area . . . . . .

3.2.1 Review of previous unit.
3.2.2 Overview of unit.
3.2.3 Location of DWI problem areas.
3.2.4 Time frames for drinking driver offenses.
3.2.5 Identification of alcohol related accident sites.
3.2.6 Summary of unit.

4. DETECTION OF DRINKING DRIVER -- PRE-APPREHENSION

4.1 Nature and Description of Detection Task . . . . . .

4.1.1 Review of previous lesson.
4.1.2 Overview of unit.
4.1.3 Probability of drinking drivers being stopped based on typical enforcement methods.
4.1.4 Types of detection methods.
4.1.5 Definition and description of detection task.
4.1.6 Summary of unit.

4.2 Types of Identification Detection Clues That Indicate DWI . . . . . .

4.2.1 Review of previous unit.
4.2.2 Overview of unit.
4.2.3 Types of Phase I identification detection clues indicating DWI.
4.2.4 Summary of unit.

4.3 Determination of Enforcement Action From Detection Clues. . . . . .

4.3.1 Review of previous unit.
4.3.2 Overview of unit.
4.3.3 Departmental policies regarding alcohol enforcement.
4.3.4 Use of discretion in alcohol enforcement.
4.3.5 Making enforcement decisions.
4.3.6 Summary of unit.

4.4 Relating Identification Detection Clues to Environment

4.4.1 Review of unit 4.2.
4.4.2 Overview of unit.
4.4.3 Relationship of identification detection clues to environment and other factors.
4.4.4 Summary of unit.

5. DETECTION OF DRINKING DRIVER -- APPREHENSION

5.1 Detection of Drinking Driver Clues While Apprehending Vehicle . . . . . .

5.1.1 Review of previous subject.
5.1.2 Overview of unit.
5.1.3 Types of reinforcement detection clues observed during apprehension indicating drinking drivers.
5.1.4 Assessment of accumulated evidence obtained from identification and reinforcement detection clues.
5.1.5 Summary of unit.

6. PRE-ARREST INVESTIGATION -- FIELD CONTACT

6.1 Detection of Drinking Driver Clues During Field Contact Pre-Arrest Investigation . . . . . .

6.1.1 Review of previous subject.
6.1.2 Overview of unit.

(continued)

6.1.3 Psychophysical and other indicators of alcoholic influence detected during field investigation.
6.1.4 Summary of unit.

6.2 Determining Enforcement Action From Accumulated Detection Clues . . . . . .

6.2.1 Review of previous units on detection.
6.2.2 Overview of unit.
6.2.3 Making of enforcement decisions.
6.2.4 Summary of unit.

7. PRE-ARREST INVESTIGATION -- ACCIDENTS

7.1 Detection of Drinking Driver Clues During Accident Pre-Arrest Investigation . . . . . .

7.1.1 Review of previous units on detection.
7.1.2 Overview of unit.
7.1.3 Types of pre-arrest investigation clues that indicate possible DWI detected during accident investigation.
7.1.4 Summary of unit.

7.2 Relationship of Four Detection Phases . . . . . .

7.2.1 Review of previous units on decision making.
7.2.2 Overview of unit.
7.2.3 Interrelation of the four detection phases.
7.2.4 Summary of unit.

8. HANDLING OF THE DRINKING DRIVER SUSPECT

8.1 Citation or Release of the Non-DWI Driver . . . . .

8.1.1 Review of the previous subject -- #6.
8.1.2 Overview of unit.
8.1.3 Citation or release of the non-DWI driver.
8.1.4 Summary of unit.

8.2 Providing Care for Persons Needing Medical Attention

8.2.1 Review of previous subject.
8.2.2 Overview of unit.
8.2.3 Symptoms of dangerous medical problems of the intoxicated.
8.2.4 Pathological conditions that have symptoms in common with those of alcohol influence.
8.2.5 Types of emergency aid in alcohol enforcement.

(continued)

8.2.6 Procedures for handling persons with medical problems.
8.2.7 Community medical resources.
8.2.8 Summary of unit.

8.3 Arrest of the Drinking Driver . . . . . .

8.3.1 Review of previous subject -- #6.
8.3.2 Overview of unit.
8.3.3 Advising subject of his Miranda rights.
8.3.4 Transportation of the arrested subject.
8.3.5 Summary of unit.

8.4 Recording and Documenting Evidence . . . . . .

8.4.1 Review of previous unit.
8.4.2 Overview of unit.
8.4.3 Purpose and importance of recording and documenting evidence.
8.4.4 Summary of unit.

8.5 Conducting Records Check . . . . . .

8.5.1 Review of previous unit.
8.5.2 Overview of unit.
8.5.3 Checking driving record with driver licensing authority of state.
8.5.4 Checking criminal record with central crime records of state.
8.5.5 Summary of unit.

9. PSYCHOPHYSICAL TESTING (CLASSROOM)

9.1 Use of Psychophysical Evaluation to Determine Extent of Alcohol Impairment . . . . . .

9.1.1 Review of previous subject.
9.1.2 Overview of unit.
9.1.3 Nature and purpose of psychophysical testing.
9.1.4 Administration of psychophysical tests.
9.1.5 Summary of unit.

9.2 Recording of Psychophysical Test Information on AIR Form . . . . . .

9.2.1 Review of previous unit.
9.2.2 Overview of unit.
9.2.3 Nature and use of AIR form.
9.2.4 Summary of unit.

10. PSYCHOPHYSICAL TESTING (LABORATORY)

10.1 Determination of Alcohol Influence by Assessment of Drinking Subject's Appearance and Speech . . . . . .

- 10.1.1 Review of previous subject.
- 10.1.2 Overview of unit.
- 10.1.3 Practice in assessment of impairment by subject's appearance.
- 10.1.4 Practice in assessment of impairment by subject's response to questions.
- 10.1.5 Summary of unit.

10.2 Determination of Alcohol Influence on Mental State . .

- 10.2.1 Review of previous unit.
- 10.2.2 Overview of unit.
- 10.2.3 Practice in assessment of impairment by subject's mental state.
- 10.2.4 Summary of unit.

10.3 Use of Coordination Tests to Determine Extent of Alcohol Impairment . . . . . .

- 10.3.1 Review of previous unit.
- 10.3.2 Overview of unit.
- 10.3.3 Practice in assessment of impairment by subject's ability to follow instructions.
- 10.3.4 Practice in assessment of impairment by subject's reactions to coordination tests (balance, walking, turning, finger-to-nose).
- 10.3.5 Summary of unit.

10.4 Making of Enforcement Decisions Based on Psychophysical Tests . . . . . .

- 10.4.1 Review of previous unit.
- 10.4.2 Overview of unit.
- 10.4.3 Practice in making enforcement decisions from Phase I, II and III detection clues and psychophysical test results.
- 10.4.4 Summary of unit.

11. CHEMICAL TESTING

11.1 Chemical Testing in DWI Enforcement . . . . . .

- 11.1.1 Review of previous subject.
- 11.1.2 Overview of unit.
- 11.1.3 Nature and purpose of chemical testing.
- 11.1.4 Selection of appropriate chemical test.

(continued)

11.1.5 Administration of chemical test.
11.1.6 Summary of unit.

11.2 Request for and Refusal of Chemical Tests . . . . . .

11.2.1 Review of previous unit.
11.2.2 Overview of unit.
11.2.3 Advice as to chemical test rights.
11.2.4 Completing "refusal to submit" form.
11.2.5 Legal responsibilities relating to chemical testing.
11.2.6 Summary of unit.

12. EXPERIENCE IN DEGENERATIVE EFFECTS OF ALCOHOL

12.1 Student Participation in Drinking Session . . . . . .

12.1.1 Overview of unit.
12.1.2 Method for controlled drinking exercise.
12.1.3 Summary of unit.

13. LEGAL AUTHORITY IN ALCOHOL ENFORCEMENT STUDENT REVIEW

13.1 Laws Pertaining to Drinking and Driving Offenses . . .

13.1.1 Overview of unit.
13.1.2 Statutes pertaining to drinking and driving offenses.
13.1.3 Elements of DWI offenses.
13.1.4 Case law pertaining to drinking and driving offenses.
13.1.5 Summary of unit.

13.2 Implied Consent Laws . . . . . .

13.2.1 Overview of unit.
13.2.2 Nature and purpose of implied consent legislation.
13.2.3 Implied consent statutes.
13.2.4 Case law pertaining to implied consent.
13.2.5 Summary of unit.

14. CASE PRESENTATION -- TESTIMONY

14.1 Presentation of Testimony in Court . . . . . .

14.1.1 Overview of unit.
14.1.2 Presentation of testimonial evidence at trial.
14.1.3 Defense tactics in drinking and driving cases.
14.1.4 Summary of unit.

15. COURSE REVIEW

15.1 Course Review . . . . . .

15.1.1 Overview of unit.
15.1.2 Review of course.
15.1.3 Summary of unit.

16. STUDENT AND COURSE EVALUATION

16.1 Student Evaluation . . . . . .

16.1.1 Overview of unit.
16.1.2 Student evaluation.
16.1.3 Summary of unit and course.

16.2 Course Evaluation . . . . . .

16.2.1 Overview of unit.
16.2.2 Course evaluation.
16.2.3 Summary of unit.

Developed Course Schedule

The schedule for the 40-hour DWI Law Enforcement Training course appears on the next page. This schedule shows the sequencing of the material and the time allotments for the sixteen subjects. Sufficient break time is given at appropriate intervals to reduce student fatigue and improve student motivation and interest.

The course schedule enables both the student and the instructional staff to anticipate course activities and to plan their presentation and study time more effectively.

DWI LAW ENFORCEMENT TRAINING -- CLASS SCHEDULE

A.M.	Monday	Tuesday	Wednesday	Thursday	Friday
8:00	REGISTRATION		Subjects 6 and 7	Subject 10	Subject 13
9:00	Subject 1	Subject 4	PRE-ARREST INVESTIGATION	PSYCHOPHYSICAL EVALUATION	LEGAL AUTHORITY
9:00	ORIENTATION	DETECTION PRE-APPREHENSION (Phase I)	(Phase III and IV)	(Laboratory)	Subject 14
10:00	break	break	break	break	break
10:00					CASE PRESENTATION TESTIMONY
11:00	Subject 13 LEGAL AUTHORITY				
12:00	L	U	N	C	H
1:00			Subject 9 PSYCHOPHYSICAL EVALUATION (Classroom)	Subject 11 CHEMICAL TESTING	Subject 15 COURSE REVIEW
2:00	Subject 2 ALCOHOL & HIGHWAY SAFETY			Subject 8 HANDLING SUSPECT	Subject 16 STUDENT AND COURSE EVALUATION
3:00	break	break	break	break	break
3:00					
4:00	Subject 3	Subject 5			
4:00	ENFORCEMENT TASK	DETECTION APPREHENSION (Phase II)			
5:00					
2:00			Subject 12 CONTROLLED DRINKING EXERCISE	Subject 12 CONTROLLED DRINKING EXERCISE	
10:00					

Developed Several Levels of Objectives

Objectives were developed for the DWI enforcement course at five levels; i.e., course objectives, subject objectives, unit or lesson objectives, terminal objectives and learning objectives. The course objectives are as follows:

1. To develop the ability to detect and properly apprehend drivers who are DWI.

2. To develop an understanding of:

   a. The relationship of drinking and driving to accidents.

   b. The effects of alcohol on driving behavior.

   c. Laws relating to drinking driver offenses.

3. To develop an appreciation of the need for sufficient enforcement action against the drinking driver.

4. To develop skills in eliminating hazards created by drinking drivers, thus serving to accomplish the fundamental alcohol countermeasure goal.

5. To develop an understanding of the procedures for processing the suspect, gathering and recording evidence and maintaining the chain of evidence.

6. To develop basic skills for testifying in court regarding observations of the suspect during detection, apprehension, arrest and field test activities.

Objectives designed to establish guidelines for the accomplishment of a subject matter area were prepared for the 16 subjects and the 36 units in the Instructor and Student Manual. Terminal behavioral objectives for each lesson topic were developed and are set forth for the instructor in the various lesson plans of the Instructor's Manual and are

identified for the student in the study plans of their Manual. Learning objectives are discussed below.

Prepared Learning Objectives for Each Content Topic

The 36 lessons in the DWI enforcement course contain 64 content topics. Learning objectives were developed for each of these topics. Use of these objectives assures that the instruction is focused toward the student. They serve to: (1) establish the expected student performance upon completion of each topic; (2) relate student learning to his actual patrol activities; (3) establish standards for measuring achievment; and (4) enable the instructor to understand the intent and expected outcome of the instructional topic. The 64 learning objectives are incorporated into the teaching strategies for the various content topic areas of the Instructor's Manual.

Prepared Various Types of Learning Activities

The various types of learning activities prepared for the DWI Law Enforcement Training course are under the general headings of classroom learning activities, laboratory learning activities and social learning activities. The specific activities used in the course are as follows:

1. Classroom learning activities.

    a. Providing students with new cognitive information by use of various visual aids.

    b. Providing students with new manipulative (skill) information by use of various types of audio and visual aids.

c. Encouraging students to discuss concepts, principles, facts and issues by structuring large and small group sessions.

d. Encouraging students to practice application of knowledge and skills by individual and small group performance.

e. Providing students with an opportunity to practice making decisions based on observed driving clues.

2. Laboratory learning activities.

a. Providing students with an opportunity to practice psychophysical testing skills.

b. Providing students with an opportunity to practice making decisions from drinking subject behavioral clues.

3. Social learning activities.

a. Providing students with an opportunity to drink and assess effects of alcohol on their own person.

b. Providing students with an opportunity to witness behavior of their fellow students when drinking measured amounts of alcohol.

Developed Instructor's Manual

The Instructor's Manual that was prepared for the DWI Law Enforcement Training course is organized by subjects and thus has 16 major divisions. Each subject contains the lesson plans for the various units of instruction and the learning activities for each lesson. The subject matter content is presented in syllabus form and pertinent indexes have been incorporated in the introductory material and the appendices of the Manual.

Each subject in the Instructor's Manual has three parts:

1. A cover page that lists the title of the subject, time required to cover subject matter, subject objectives, units or lessons to be found in subject and position of any appended material for the subject.

2. A lesson plan for each unit of instruction in the subject. Each lesson plan includes a unit objective, terminal objectives, references for lesson, materials needed, equipment needed, student assignments and study questions.

3. The learning activities for each unit of instruction in the subject. The learning activities section includes the unit objective, content topics and the various learning activities for each topic. The teaching strategies, content, time designations, references and aids needed all appear in the learning activities section in context of their use.

Prepared Student Manual

A Student Manual was developed and prepared for the student-officer. The Manual provides the student with required reading material and affords a convenient means of review for problem solving sessions and the final examination. It is organized in the same manner as the Instructor's Manual with the same format and numbering system. Each subject, lesson and topic relates directly to the Instructor's Manual to facilitate immediate reference. The subject matter content is in narrative form and includes the tables and charts used by the instructor in the learning exercises.

Use of the Student Manual will enable the student to effectively prepare for each lesson. In addition, a systematic approach to use of the Manual will enable the student to concentrate on areas he needs to study and provide him with an

opportunity for self-learning and evaluation. Finally, the Manual will serve as a reference resource after completion of the course.

Prepared Course Guide

A Course Guide has been prepared for the DWI Law Enforcement Training program to serve as a guide in organizing and administering a basic training course for the alcohol enforcement officer. It should be used as the basic planning document in preparing to conduct a DWI Law Enforcement Training course.

The Course Guide contains an explanation of the developmental effort of the project and guidelines for conducting the course; i.e., course structure, course management and procedure for conducting course. The method of interpreting and using the various items of the instructional packet is discussed in detail.

Developed Extensive Training Materials

A packet of instructional aids was developed for the DWI Law Enforcement Training course consisting of fifty-four 16 mm filmed situations depicting detection clue problems; sixty-one overhead transparencies; four video tape segments on psychophysical testing; three video tape segments on medical aspects of DWI enforcement; and four video tape segments of mock trial. Each of these aids is cross-indexted with the specific content item in the Instructor's Manual to facilitate its appropriate use. A listing of the various filmed situations and video tape segments prepared for the course may be found in Appendix A.

A listing of the transparencies prepared for the course may be found in Appendix B.

Developed Student and Course Evaluation Packet

A packet of evaluation aids was developed and prepared for the DWI Law Enforcement Training course consisting of practice session student self-testing response forms, pre and post test examination and course evaluation forms. A Visual Aids Log and Scoring Key has been included in the Evaluation Packet. These aids are cross-indexed with the appropriate topic number and are identified in the Instructor's Manual within the context of their use. A listing of the evaluation aids prepared for the course may be found in Appendix C.

Prepared Instructional Methods

Training Program Design

The primary objective of the DWI Law Enforcement Training course is the development of practical skills related to the alcohol enforcement officer's tasks. Therefore, more than one-half of the instructor-student contact hours are spent in student-oriented practice and laboratory sessions devoted to detection, apprehension and testifying in court. One-third of the course pertains specifically to detection of drinking driver clues.

Subject matter on the technical, statistical and legal matters related to control of the drinking driver is scheduled in the course to assure understanding not only of the basic

principles, empirical evidence (facts), laws and regulations, but also of the important role of the officer's enforcement activities in the total alcohol countermeasures program. Course content on these cognitive subjects (background and supportive information) is necessary for two reasons. First, in order to develop and maintain student interest, motivation and self-confidence, it would not be sufficient to simply improve the officers' skills without also giving them an understanding of why they are using these skills. Second, the officer must have a fundamental understanding of the cognitive subject matter of the course to be a competent witness when he has to testify in court.

The training program was developed by identifying and analyzing the tasks actually performed in the field by alcohol enforcement officers. In order to assure the transfer of learning activities to actual alcohol enforcement practices and needs, the program is designed around concepts and methods most likely to facilitate the transfer of learning. Emphasis has been placed on student involvement with extensive use of demonstrations, practice sessions, problem solving, student self-testing and laboratory activities. Each lesson on skill content allows practice of the specific skills under circumstances related to actual working conditions. Specifically, the program is designed to:

1. Place emphasis on areas where students need help; e.g., detection and apprehension of alcohol offenders.

2. Sequence lessons according to practitioner's needs to keep the learning experience as parallel to the actual work experience as possible.

3. Reduce formal lectures and noninteractive methods by replacing with demonstrations, practice sessions and student-involved activities.

4. Establish and maintain interaction in the learning environment, both between student and instructors and between student and materials.

5. Provide opportunities for practical skill application based on actual job requirements utilizing simulated working conditions.

6. Relate classroom and laboratory activities in most effective manner to provide the maximum educational experience.

7. Test and evaluate the stated training and behavioral objectives to assure attainment of proficiency levels established for program.

8. Permit effective instruction and realistic assessment of student achievement.

9. Provide instructional personnel with continuous feedback that will permit course evaluation for program revision.

Instructional Techniques

The instructional techniques or teaching strategies for the DWI Law Enforcement Training course were selected to most appropriately fit the content of each topic and to assure maximum student involvement. Student oriented activities were used to provide optimum teaching experiences.

Due to the nature of the DWI Law Enforcement Training course, emphasis was placed on teaching strategies that meet the

following criteria:

1. Obtain as much instructor/student interaction as possible.

2. Encourage peer group interaction and thus self-learning.

3. Demonstrate alcohol enforcement techniques and procedures (detection, apprehension, case preparation, court testimony).

4. Provide sufficient time for student practice under the guidance of an experienced instructor.

The various teaching strategies, which are applicable to DWI enforcement training and are incorporated into the various lessons of the training course, appear in Table 2. This table relates the teaching strategies to the three general types of learning; i.e., cognitive, attitudinal and skills. The manner in which these strategies are located and would be used in the various topics of the course may be seen in Table 3.

Student Evaluation

Student evaluation techniques used in the DWI Law Enforcement Training course consisted of a pre-test, individual student response cards and a post-test. Copies of various evaluation instruments developed for the course have been placed in the Evaluation Package.

The pre-test was designed to measure the entry level knowledge of the students so instruction can be geared to their specific needs and the amount of individual accomplishment during the course can be measured.

Table 2
RELATIONSHIP OF TEACHING STRATEGIES TO TYPES OF LEARNING

Teaching Strategies	Types of Learning: Knowledge Cognitive	Attitudes Affective	Skills Psycho-Motor
Clarification	x	x	
Decision-making	x		x
Discussion	x	x	
Demonstration	x		x
Inquiry		x	
Interpreting	x		
Practice Session	x		x
Problem Solving	x	x	
Reading Assignment	x		
Role Playing		x	x
Student Participation	x	x	x
Student Reaction		x	
Summarizing	x		
Small Group Discussion	x	x	
Observing and Classifying	x		x
Testing	x		x
Review	x		x
Overview	x		x

Table 3
LIST OF TEACHING STRATEGIES
IN DWI LAW ENFORCEMENT TRAINING COURSE

Topic No.	Topic Title	Teaching Strategy
1.1.1	Course objectives.	Discussion
1.1.2	Plans and procedures for conducting the course.	Clarification
1.1.3	Evaluation methods for course.	
1.2.1	Administering pre-test examination.	Testing
1.3.1	Nature and number of report forms used in alcohol enforcement.	Demonstration
1.3.2	Design and style of required reports.	Interpreting
2.1.1	Overview of unit.	Overview
2.1.2	Physiological processes of alcohol absorption, metabolism and elimination.	Reading assignment Group discussion
2.1.3	Individual tolerance in use of alcohol.	Problem solving
2.1.4	Effects of alcohol on brain and body functions.	Testing Answering questions
2.1.5	Summary of unit.	
2.2.1	Overview of unit.	Overview
2.2.2	Classification of drinking drivers.	Reading assignment
2.2.3	Accidents related to drinking and driving.	Group discussion Problem solving Testing Answering questions
2.2.4	Summary of unit.	Answering questions Summarizing
3.1.1	Review of previous lesson.	Review
3.1.2	Overview of unit.	Overview
3.1.3	Nature of drinking and driving incidents (offenses) in total driving population.	Reading assignment Group discussion
3.1.4	Characteristics of driving patterns of impaired drivers.	Problem solving Testing
3.1.5	Probabilities of drivers on road who have been drinking.	Answering questions
3.1.6	Use of alcohol enforcement as a deterrence (prevention).	
3.1.7	Summary of unit.	Answering questions summarizing

Table 3 (continued)
LIST OF TEACHING STRATEGIES

Topic No.	Topic Title	Teaching Strategy
3.2.1	Review of previous unit.	Review
3.2.2	Overview of unit.	Overview
3.2.3	Location of DWI problem areas.	Reading assignment
3.2.4	Time frames for drinking and driver offenses.	Group discussion
3.2.5	Identification of alcohol related accident sites.	Problem solving Testing Answering questions
3.2.6	Summary of unit.	Answering questions Summarizing
4.1.1	Review of previous lesson.	Review
4.1.2	Overview of unit.	Overview
4.1.3	Probability of drinking drivers being stopped based on typical enforcement methods.	Reading assignment Discussion
4.1.4	Types of detection methods.	Answering questions
4.1.5	Definition and description of detection task.	
4.1.6	Summary of unit.	Answering questions Summarizing
4.2.1	Review of previous unit.	Review
4.2.2	Overview of unit.	Overview
4.2.3	Types of Phase I identification detection clues indicating DWI.	Demonstration, practice, testing
4.2.4	Summary of unit.	Answering questions Summarizing
4.3.1	Review of previous unit.	Review
4.3.2	Overview of unit.	Overview
4.3.3	Departmental policies regarding alcohol enforcement.	Clarification, discussion
4.3.4	Use of discretion in alcohol enforcement.	Discussion
4.3.5	Making enforcement decisions.	Decision making, discussion
4.3.6	Summary of unit	Answering questions Summarizing
5.1.1	Review of previous subject.	Review
5.1.2	Overview of unit.	Overview
5.1.3	Types of reinforcement detection clues observed during apprehension indicating drinking drivers.	Classifying, demonstration, practice, testing
5.1.4	Assessing accumulated evidence obtained from identification and reinforcement detection clues.	Decision making, demonstration, practice, testing Problem solving
5.1.5	Summary of unit.	Answering questions Summarizing

Table 3 (continued)
LIST OF TEACHING STRATEGIES

Topic No.	Topic Title	Teaching Strategy
6.1.1	Review of previous subject.	Review
6.1.2	Overview of unit.	Overview
6.1.3	Psychophysical and other indicators of alcoholic influence detected during field investigation.	Classifying Demonstration, practice, testing
6.1.4	Summary of unit.	Answering questions
6.2.1	Review of previous units on detection.	Review
6.2.2	Overview of unit.	Overview
6.2.3	Making enforcement decisions.	Decision making, demonstration, practice, testing
6.2.4	Summary of unit.	Answering questions
7.1.1	Review of previous units on detection.	Review
7.1.2	Overview of unit.	Overview
7.1.3	Types of pre-arrest investigation clues that indicate possible DWI detected during accident investigation.	Classifying Discussion
7.1.4	Summary of unit.	Answering questions Summarizing
7.2.1	Review of previous units on decision making.	Review
7.2.2	Overview of unit.	Overview
7.2.3	Interrelation of the four detection phases.	Discussion
7.2.4	Summary of unit.	Answering questions Summarizing
8.1.1	Review of previous subject #6.	Review
8.1.2	Overview of unit.	Overview
8.1.3	Citation or release of non-DWI driver.	Decision making, discussion
8.1.4	Summary of unit.	Answering questions
8.2.1	Review of previous subject.	Review
8.2.2	Overview of unit.	Overview
8.2.3	Symptoms of dangerous medical problems of the intoxicated.	Problem solving Role playing
8.2.4	Pathological conditions that have symptoms in common with those of alcohol influence.	Demonstration Discussion
8.2.5	Types of emergency aid in alcohol enforcement.	Testing
8.2.6	Procedures for handling persons with medical problems.	
8.2.7	Community medical resources.	
8.2.8	Summary of unit.	Answering questions

Table 3 (continued)
LIST OF TEACHING STRATEGIES

Topic No.	Topic Title	Teaching Strategy
8.3.1	Review of previous subject #6.	Review
8.3.2	Overview of unit.	Overview
8.3.3	Advising subject of his Miranda rights.	Interpretation, discussion
8.3.4	Transportation of the arrested subject.	Discussion
8.3.5	Summary of unit.	Answering questions Summarizing
8.4.1	Review of previous unit.	Review
8.4.2	Overview of unit.	Overview
8.4.3	Purpose and importance of recording and documenting evidence.	Clarification, discussion
8.4.4	Summary of unit.	Answering questions Summarizing
8.5.1	Review of previous unit.	Review
8.5.2	Overview of unit.	Overview
8.5.3	Checking driving record with driver licensing authority of state.	Discussion
8.5.4	Checking criminal record with central crime records of state.	Discussion
8.5.5	Summary of unit.	Answering questions Summarizing
9.1.1	Review of previous subject.	Summarizing, review
9.1.2	Overview of unit.	Overview
9.1.3	Nature and purpose of psychophysical testing.	Clarification, discussion
9.1.4	Administration of psychophysical test.	Student participation Discussion, demonstration Decision making
9.1.5	Summary of unit.	Summarizing
9.2.1	Review of previous unit.	Review
9.2.2	Overview of unit.	Overview
9.2.3	Nature and use of AIR form.	Clarification, discussion
9.2.4	Summary of unit.	Summarizing
10.1.1	Review of previous subject.	Review
10.1.2	Overview of unit.	Overview
10.1.3	Practice in assessment of impairment by subject's appearance.	Interpreting Decision making
10.1.4	Practice in assessment of impairment by subject's responses to questions.	Interpreting Decision making
10.1.5	Summary of unit.	Summarizing
10.2.1	Review of previous unit.	Review
10.2.2	Overview of unit.	Overview

(continued)

Table 3 (continued)
LIST OF TEACHING STRATEGIES

Topic No.	Topic Title	Teaching Strategy
10.2.3	Practice in assessment of impairment by subject's mental state.	Interpreting, decision making, discussion
10.2.4	Summary of unit.	Summarizing
10.3.1	Review of previous unit.	Review
10.3.2	Overview of unit.	Overview
10.3.3	Practice in assessment of impairment by subject's ability to follow instructions.	Interpreting Decision making Discussion
10.3.4	Practice in assessment of impairment by subject's reactions to coordination tests (balance, walking, turning, finger-to-nose).	Interpreting Decision making Discussion Demonstration, practice, testing
10.3.5	Summary.	Summarizing
10.4.1	Review of previous unit.	Review
10.4.2	Overview of unit.	Overview
10.4.3	Practice in making enforcement decisions from Phase I, II and III detection clues and psychophysical test results.	Interpreting Decision making Discussion Demonstration, practice, testing
10.4.4	Summary of unit.	Summarizing Answering questions
11.1.1	Review of previous subject.	Review
11.1.2	Overview of unit.	Overview
11.1.3	Nature and purpose of chemical testing.	Clarification, discussion
11.1.4	Selection of appropriate chemical test.	Clarification, discussion
11.1.5	Administration of chemical test.	Clarification, discussion
11.1.6	Summary of unit.	Answering questions Summarizing
11.2.1	Review of previous unit.	Review
11.2.2	Overview of unit.	Overview
11.2.3	Advice as to chemical test rights.	Clarification, discussion
11.2.4	Completing "refusal to submit" form.	Clarification, discussion
11.2.5	Legal responsibilities relating to chemical testing.	Clarification, discussion
11.2.6	Summary of unit.	Answering questions Summarizing

Table 3 (continued)
LIST OF TEACHING STRATEGIES

Topic No.	Topic Title	Teaching Strategy
12.1.1	Overview of unit.	Overview
12.1.2	Method of controlled drinking exercise.	Student participation Demonstration, practice, testing Role playing Problem solving
12.1.3	Summary of unit.	Summarizing
13.1.1	Overview of unit.	Overview
13.1.2	Statutes pertaining to drinking and driving offenses.	Reading assignment Clarification, discussion
13.1.3	Elements of DWI offenses.	Testing
13.1.4	Case law pertaining to drinking and driving offenses.	Answering questions
13.1.5	Summary of unit.	Answering questions Summarizing
13.2.1	Overview of unit.	Overview
13.2.2	Nature and purpose of implied consent legislation.	Reading assignment Clarification, discussion
13.2.3	Implied consent statutes.	Testing
13.2.4	Case law pertaining to implied consent.	Answering questions
13.2.5	Summary of unit.	Answering questions Summarizing
14.1.1	Overview of unit.	Overview
14.1.2	Presentation of testimonial evidence at trial.	Demonstration, practice, testing
14.1.3	Defense tactics in drinking and driving cases.	Discussion Answering questions
14.1.4	Summary of unit.	Answering questions Summarizing
15.1.1	Overview of unit.	Overview
15.1.2	Review of course.	Answering questions
15.1.3	Summary of unit.	Summarizing
16.1.1	Overview of unit.	Overview
16.1.2	Student evaluation.	Testing
16.1.3	Summary of unit and course.	Summarizing
16.2.1	Overview of unit.	Overview
16.2.2	Course evaluation.	Student reaction
16.2.3	Summary of unit.	Answering questions

Individual student response cards provide immediate feedback as to how well each student is accomplishing the stated learning objective for the topic. This feedback is beneficial to both the instructor and the student officers. The instructor knows immediately whether or not the students have been successful and if he may proceed. This also provides the student with the immediate results of his activity and serves as a reward condition.

The post-test prepared for the course was designed to: (1) determine how many of the terminal objectives each student has achieved; (2) determine what proportion of the students achieved each terminal objective; and (3) determine which instructional procedures should be retained and which should be modified.

Course Evaluation

The purpose of a course evaluation is to gather information that will enable the instructor to improve his instruction. However, merely gathering and interpreting information is insufficient. In addition, the instructor should use the information to modify his instructional procedures when a change is indicated.

The information should be used to formulate reasons for successes and failures, and for each failure to select an alternative procedure to implement the next time the course is offered. Instructional improvement is a never-ending process consisting of planning, testing, interpretation and modification.

In order to assist the DWI enforcement training instructor in obtaining information about the instructional program, a post-course questionnaire has been placed in the Evaluation Aids

Packet. This questionnaire is designed to obtain feedback from students concerning the program they have just completed. The questionnaire consists of only a few pertinent questions which the students should answer anonymously.

The questionnaire items vary from general information about the entire course to specific information about parts of the course. These questions permit students to identify problems in the program which the instructor may fail to notice. In addition, the responses enable the instructor to pinpoint differences in the reactions of individual students so that he does not get a one-sided opinion from just a few.

All suggestions for course improvement which are practical should be implemented prior to another training session. These improvements should be discussed with the present class so that they know the instructor is interested in, and responsive to, their needs. Those suggestions which are impractical should be discussed with the class so that they understand why these particular items cannot be changed. This type of evaluation will not only improve the instructional program, but will also develop good rapport with the students.

Modifications to the course should also be logged as the instructor may find that not all suggested changes result in an improvement in the course. Logging changes will allow the instructor to, over the course of several programs and modifications, select the one method which, while not necessarily the most popular, is the most effective.

An additional evaluation of the course's effectiveness would be to collect information about how well the students who have taken the course perform in actual enforcement situations involving the drinking driver. An analysis of the difficulties they have, as well as the extent of their success, would provide an indication as to how the training program might be modified for better results.

Conducted Four Field Trials

Purpose of Field Trials

The purpose and objectives for conducting the field trials during the development of the DWI enforcement training program were as follows:

1. To obtain critiques of the various aspects of the course from ultimate users.
2. To test the relevancy and utility of the course content.
3. To test the various instructional methods.
4. To test the instructional materials developed for the course.
5. To test the evaluation materials developed for the course.

Nature of Field Trials

After the instructional package had been revised during tasks 4 and 5 of the project for use in the various states of the nation, four field trials were conducted to test the revised content, teaching strategies and instructional aids developed for the DWI enforcement training program. Extensive revision had to be made in the instructional aids when all the 35 mm

slides were replaced by 16 mm film situations and video tape segments. Considerable changes had to be made in the printed material (Instructor's Manual, Student Manual and Course Guide) to accommodate the new media. Items in the Evaluation Packet had to be completely redesigned, especially the student response forms and the Film Log and Scoring Key.

The four field trials were scheduled and utilized to test the instructional package. The first three field trials tested the revised instructional package by having members of the project team (HTSC staff) conduct the training course. The fourth field trial was designed to assess the problems future users of the training package would encounter when attempting to teach the course.

The first three field trials were held in Bandera, Texas, January 13-18, 1974; Spokane, Washington, January 28-February 1, 1974; and Belton, Texas, March 11-15, 1974. The fourth field trial was held in Anchorage, Alaska, May 13-17, 1974. The Bandera and Spokane field trials were hosted by the State Commission on Law Enforcement Education and Training. The Belton field trial was hosted by the Central Texas Alcohol and Safety Action Program. The Anchorage field trial was hosted by the Governor's Representative for Highway Safety and the Alaska State Troops.

Conduct of Field Trials

Prior to conducting the three field trials to test the revised instructional package: (1) sites had to be selected for

the training course; (2) hosting agencies were identified and obtained to coordinate the course; (3) advanced arrangements were made for facilities and equipment; and (4) student-officers representing various ultimate users of the training program had to be obtained.

In September, 1973, the Principal Investigator of the project attended the annual meeting of the National Conference of Governors' Highway Safety Representatives (NCGHSR) to solicit the support and cooperation of the Governor's Representatives who were willing to participate in the forthcoming field trials. Response to the request for assistance was more than sufficient to obtain the desired number of sites and student enrollments for the field trials.

After completing the preliminary planning, scheduling of field trials and arrangement tasks, the HTSC instructional staff proceeded to conduct the various field trials. During the conduct of the training courses the participating officers performed dual roles. In addition to reacting to the various instructional aspects of the course as students, they were asked to critique (analyze, validate, delete, amend) the many detection clues, visual aids and student response forms prepared for the course. This student input was used along with HTSC, NHTSA and other observer evaluations to make final revisions in the instructional package.

During the conduct of the first three field trials of the project, HTSC staff and others concerned with the project became

acutely aware of various instructional problems inherent in the use of the student-oriented training program. In an attempt to minimize these problems as much as possible prior to completion of the project, NHTSA authorized an additional field trial to test the instructional package whereby two independent instructors from a different educational institution, a master teacher and one with limited experience (qualified traffic law enforcement instructors), would teach the course to a class of state and local officers.

Arrangements were made and the independent instructors designated to conduct the fourth field trial. These instructors taught the course without the benefit of having had training in the use of the instructional package other than an orientation dealing with the nature, purpose and design of the instructional program. They were given advanced copies of the Instructor's Manual, Student Manual and evaluation aids; were briefly oriented on how to use the package; reviewed the fifty-four 16 mm film situations; reviewed the video tape segments and reviewed the student response forms.

The MSU Principal Investigator of the NHTSA project monitored the field trial and assessed the problems encountered by the instructors in the conduct of the course. Each course topic was analyzed to determine the nature and extent of the instructional problems. The information obtained from this assessment was very beneficial in the final revision of the Instructor's Manual and Course Guide.

Table 4 sets forth the enrollment data compiled for the student-officers participating in the four field trials. The table shows for each field trial the student distribution by law enforcement jurisdiction and the educational and experience level of the students. Of the 125 officers trained, 53 percent were from municipal departments, 17 percent from county departments, 25 percent from state agencies and 5 percent from the military (MPs). Fifty-eight percent had some college education, 40 percent had only a high school education and 2 percent had not completed high school. Sixty percent of the students had a limited or moderate amount of police experience (group for which course was designed) and 40 percent were senior officers. The senior officers attending the courses were used to obtain a more extensive critique of the instructional package.

The heterogeneous make-up of the students enrolled in the various field trials afforded a representative cross-section of future trainees to react to the instructional package. This was necessary for the testing phases of the project, but is not recommended for ultimate training programs. The more homogenous the grouping of trainees for DWI enforcement training, the more effective will be the instruction.

During the testing of the DWI law enforcement training instructional package in the four field trials, the project staff also analyzed the management aspects involved when conducting the course. Most of the management tasks and activities can be accommodated in a typical training environment with appropriate

Table 4
DWI LAW ENFORCEMENT TRAINING FIELD TRIALS

Student Data

	Bandera School #1	Spokane School #2	Belton School #3	Alaska School #4	TOTAL
Jurisdiction					
Municipal	23	19	15	9	66
County	6	10	5		21
State		10	1	20	31
Military			7		7
					125
Experience Level					
5 yrs. or less	16	30	20	10	75
6-9 yrs.	6	6	5	7	34
10+ yrs.	7	3	3	3	16
					125
Educational Level					
No High School			2		2
High School	10	10	20	10	50
College (less than 4 yrs.)	16	24	6	16	62
Degree (4+ yrs.)	3	5		3	11
					125

planning and preparation. There is one management problem, however, that is contingent upon the manner in which students are housed and controlled; i.e., the planning for the controlled drinking exercise during the evening hours.

In order to evaluate the utility and feasibility of the controlled drinking exercise, this unit was taught in two field trials and eliminated from the other two, thus permitting collection of student achievement data from the two groups. When student achievement scores over cognitive materials and psychomotor skills were compared between the two groups, there was no significant difference. When analyzing the students' course evaluations (Delphi technique), however, to assess affective learning, they unanimously contended that the unit was very beneficial and recommended its use in the course.

In order to further test the management problems imposed by the controlled drinking exercise and to collect additional data to substantiate that from the DWI enforcement field trials, similar data was collected from six Police Alcohol Training courses conducted in Michigan during the Spring of 1974 by the use of the same testing method. Analysis of these data (cognitive, psychomotor and affective) disclosed the same results as found in the field trials.

The conclusion drawn from the above tests lead to the following management alternatives:

1. When students "live-in" and are assigned full-time to the course, conduct the controlled drinking exercise to accomplish affective learning.

2. When students commute to class and are assigned full-time to the course, conduct the controlled drinking exercise with rigid controls; i.e., do not permit students to leave the area until their BAC approaches zero percent.

3. When students commute to class and also perform work assignments or are subject to call, conduct of the controlled drinking exercise is not feasible and cannot be done.

4. When facilities or manpower are restricted due to budget or other considerations, the controlled drinking exercise is not feasible.

The management decision, therefore, pertaining to the use of the controlled drinking exercise in the course depends upon the control of the instructional staff upon the students. The "trade-off" made when eliminating the unit in order to accommodate budget or manpower management problems will be a loss in affective learning. The loss of cognitive learning or development of psychomotor skills will be insignificant.

A detailed discussion regarding the management of the DWI Law Enforcement Training course may be found in the Course Guide prepared for the project.

Revision of Instructional Package

During each of the field trials, after completion of each field trial, and after conducting the four field trials, the project staff made numerous revisions that were identified as necessary by the testing process. The nature and scope of these revisions is discussed below.

Twelve of the 54 detection clue problem solving situations that had been taken on 16 mm film during task 4 of the project

(primarily the longer and more complex situations) had to be reshot. Video tape segments of the case presentations (mock trial) had to be revised. Video tape segments on medical aspects of DWI enforcement had to be condensed and reworked. Transparencies had to be amended and redesigned. Student response forms, visual aids logs and scoring keys went through several revisions.

The printed documents designed for the course; i.e., Instructor's Manual, Student Manual and Course Guide, had to be revised to accommodate the changes made in the media. This resulted in rather extensive revisions of teaching strategies and learning objectives in the Instructor's Manual because of the greater utility of the 16 mm film. The exercise of amending or revising the learning objectives in turn necessitated the revision of the pre-test and post-test evaluation items.

The revised and refined instructional package was then prepared and submitted to NHTSA for future DWI enforcement training program implementation.

CONCLUSIONS AND RECOMMENDATIONS

Realizing that more enforcement effort should be directed at DWI offenders, especially those having Blood Alcohol Concentration (BAC) levels below .15%, NHTSA funded the development of a DWI enforcement course and materials for training state and local officers. The major objectives were to help law enforcement officers more effectively detect and apprehend DWI drivers

and prepare cases in a manner that would increase the rate of convictions.

The DWI enforcement course is a comprehensive, one-week training program based upon a detailed analysis of the alcohol enforcement task. Most of the 64 content topics covered in the course are problem solving and laboratory sessions. The instruction of these topics requires: (1) the use of specifically designated teaching strategies; (2) careful adherence to learning objectives; (3) thorough understanding of the learning system design; (4) understanding and practice in proper use of the instructional media and evaluation aids; and (5) considerable knowledge of subject matter content. Therefore, effective instruction of the DWI enforcement course necessitates thorough instructor training in use of the NHTSA package.

During the field testing phase of the DWI enforcement course development project, HTSC staff and others concerned with the project became acutely aware of various instructional problems inherent in the use of this student-oriented training course. In addition to the field trials conducted for the project on use of the DWI enforcement package, HTSC has had several opportunities to further evaluate instructional problems by using different instructors for various topics in six Michigan Police Alcohol Training Schools. The experience obtained in these schools further substantiates the need for a good instructor training program.

The nature and scope of the learning system design make the instruction of the DWI enforcement training course different from courses previously developed under NHTSA contracts. The comprehensive nature of highly specialized content and the complexity of the instructional package necessitates that the student instructors acquire in-depth knowledge of the police alcohol enforcement task and develop competence in the use of the DWI enforcement instructional package.

The DWI enforcement instructional package has been designed to utilize numerous instructional and evaluation aids. This was the basic purpose and intent in the development of the course and makes it unique to anything previously attempted. The teaching strategies cannot be utilized, the learning objectives cannot be accomplished and the police officers cannot be trained effectively until a cadre of good, competent instructors have been trained in the proper use of the total instructional package.

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Specific references that the instructors should use for the various lessons in the training program are listed in each lesson plan and indexed within context of the subject matter content in the Instructor's Manual.

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APPENDIX A

LIST OF INSTRUCTIONAL MEDIA

LIST OF INSTRUCTIONAL MEDIA

Detection Clue Filmed Situations

Unit	Title	Situation #	Topic
4.2	Identification (Phase I) Detection Clues That Indicate DWI	1-10	4.2.3A
4.4	Relationship of Detection Clues to Environment (STRESS)	11-21	4.4.3C
5.1	Apprehension (Phase II) Detection Clues That Indicate DWI	22-24	5.1.3A
5.1	Identification (Phase I) and Apprehension (Phase II) Clue Combinations	25-29	5.1.4B
6.1	Field Investigation (Phase III) Detection Clues	30-32	6.1.3A
6.2	Accumulated Detection Clues for Identification (Phase I), Apprehension (Phase II) and Field Investigation (Phase III)	33-48	6.2.3D
10.4	Accumulated Detection Clues, Psychophysical Testing and Enforcement Decisions	49-54	10.4.3A

Video Taped Segments

Unit	Title	Segment #	Topic
2.1	Physiological Process of Alcohol Absorption, Metabolism and Elimination	1	2.1.2A
8.2	Symptoms of Dangerous Medical Problems of Intoxicated	2	8.2.3A
8.2	Pathological Conditions that have Symptoms in Common with those of Alcohol Influence	3	8.2.4A
10.3	Psychophysical Testing Detection Clues	4-7	10.3.4A
14.1	Presenting Testimonial Evidence at Trial	8	14.1.2C
14.1	Defense Tactics in Court Testimony	9-11	14.1.3B

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APPENDIX B

LIST OF TRANSPARENCIES

LIST OF TRANSPARENCIES

Unit	Title	Topic	Number of Transparencies
1.1	Course Objectives	1.1.1-A.	(6)
1.1	Course Schedule	1.1.2-B.2	(1)
1.1	Student Classroom Learning Activities	1.1.2-E.1	(2)
1.1	Student Laboratory Learning Activities	1.1.2-E.2	(1)
1.1	Social Learning Activities	1.1.2-E.3	(1)
1.1	Five Evaluation Methods	1.1.3	(1)
2.2	Classification of Drinking Drivers	2.2.2-A.3	(3)
2.2	National Statistics on Alcohol and Highway Safety	2.2.3-A.2.b	(1)
2.2	Driver's Odds of Involvement in Accident	2.2.3-A.2.f	(1)
2.2	Distribution of Fatal Drivers by BAC (see alco 2.2.3-C.1.i)	2.2.3-C.1.e	(1)
2.2	Distribution of Fatal Drivers by Hour of Accident (see also 2.2.3-C.1.e)	2.2.3-C.1.i	(1)
2.2	Comparison of Moving Violations of Fatal Drivers and Sample of Driving Population	2.2.3-C.1.k	(1)
2.2	Number and Percent of Drivers in Accidents at Specified Alcohol Levels Compared with Control Group	2.2.3-C.2.e	(1)
2.2	BACs of Fatal Drivers and Probability of Accident	2.2.3-C.2.i	(1)
2.2	BAC $\geq$ .10 and Fatal Accidents	2.2.3-C.3.a	(1)
2.2	BAC Differences Between Responsible and Non-Responsible Drivers	2.2.3-C.4.b	(1)

LIST OF TRANSPARENCIES (continued)

Unit	Title	Topic	Number of Transparencies
2.2	Fatal Accidents in California -- 1962-68	2.2.3-C.4.c	(1)
2.2	Fatal and Injury Accident Rates -- 1968	2.2.3-C.5.c	(1)
2.2	Probability of Involvement with DWI in Certain Point of Time	2.2.3-C.5.d	(1)
3.1	Alcohol Consumption	3.1.3-A.2.a	(1)
3.1	Alcohol Consumption and Driving	3.1.3-A.3.a	(1)
3.1	Comparing BAC to Drinks Required	3.1.3-A.5.a	(1)
3.1	Distribution of Drivers by BAC (see also 3.1.4-A.1.a)	3.1.3-B.2.g	(1)
3.1	Distribution of Drivers by BAC and Age Groups (see also 3.1.3-C.2.g)	3.1.4-A.1.a	(1)
3.1	BAC Distribution by Age of Driver Subgroups	3.1.4-A.1.b	(1)
3.1	Percent of Drivers on Road with Various BACs	3.1.5-A.2	(1)
3.1	Violation Estimates	3.1.5-B.1.a&b	(3)
3.1	Deterrence Factor in Alcohol Enforcement Patrol	3.1.6-A.1	(1)
3.2	Locations of Drinking	3.2.3-A.1	(1)
3.2	Locations of Drinking Drivers	3.2.3-B.2.c	(1)
3.2	Number of Persons with BACs at Specific Points of Time	3.2.4-A.2.d	(1)
3.2	Percent of Drinking Drivers by Time of Night	3.2.4-A.2.e	(1)
4.1	Four Types of Detection Methods	4.1.4-A (#1)	(1)
4.1	DWI Enforcement Assumption	4.1.4-A (#2)	(1)

LIST OF TRANSPARENCIES (continued)

Unit	Title	Topic	Number of Transparencies
4.1	Surveillance Method in DWI Enforcement	4.1.4-A.1	(1)
4.1	Stopping Drivers for Non-Moving Violations	4.1.4-A.2	(1)
4.1	Contacting Drivers Involved in Accidents	4.1.4-A.3	(1)
4.1	Stopping Drivers for Roadside Checks	4.1.4-A.4	(1)
4.1	Four Detection Phases	4.1.5-B., 4.1.5-B.1, 4.1.5-B.2, 4.1.5-B.3, 4.1.5-B.4, 4.1.5-C.	(6)
4.1	Types of Clues by Detection Phase	4.1.5-D.	(1)
4.4	Detection Clues Related to Environment	4.4.3-A.	(1)
6.2	Decision Matrix on Accumulated Detection Clues	6.2.3-C.1	(1)
7.1	Detection Clue Decision Flow Chart	7.2.3-A.3	(1)
8.1	Enforcement Alternatives	8.1.1-A.	(1)
8.3	When to Advise of Miranda Rights	8.3.3-A.3.b	(1)
8.3	Miranda Rights	8.3.3-A.4	(1)
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APPENDIX C

LIST OF EVALUATION AIDS

Student Laboratory Response Forms

Unit	Title	Situation	Topic
4.2	Types of Identification (Phase I) Detection Clues That Indicate DWI	1-10	4.2.3-A
4.4	Relationship of Identification Detection Clues to Environment (STRESS)	11-21	4.4.3-C
5.1	Types of Apprehension (Phase II -- Reinforcement) Clues That Indicate Drinking Driving	22-24	5.1.3-A
5.1	Phase I and II Clue Combinations	25-29	5.1.4-B
6.2	Determining Enforcement Action From Accumulated Detection Clues	33-48	6.2.3-D
10.4	Psychophysical Testing and Enforcement Decisions	49-54	10.4.3-A
12.1	Controlled Drinking Exercise		12.1.2-B
14.1	Presenting Testimonial Evidence at Trial	Segment #8	14.1.2-C
14.1	Defense Tactics in Court Testimony	Segments 9-11	14.1.3-B

Student Examinations

1.2	Pre-Test Examination	1.2.1-B.
16.2	Post-Test Examination	16.1.2-A.

Course Evaluation Form

16.1	Course Evaluation	16.2.2-A.